

(No Model.)

J. G. CRAWFORD.

CENTRIFUGAL CLOTHES WRINGER.

No. 273,262.

Patented Mar. 6, 1883.

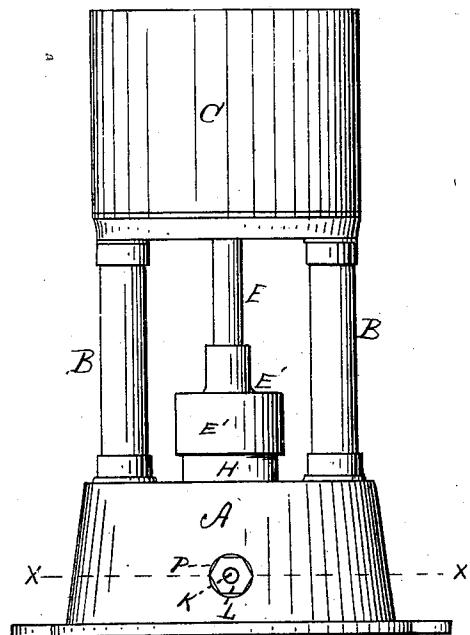


FIG. 1.

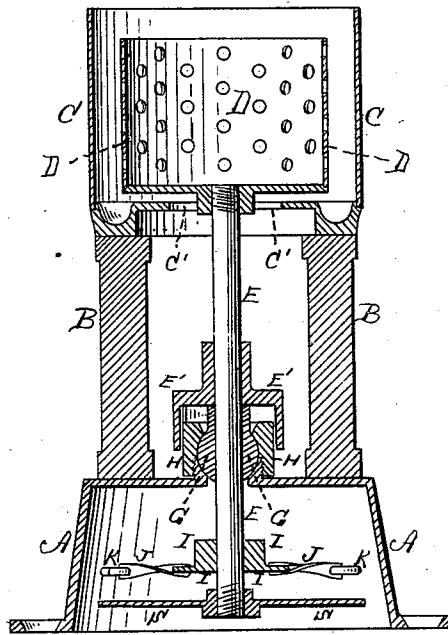


FIG. 2.

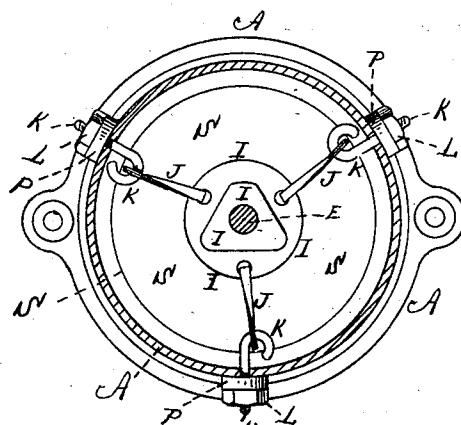


FIG. 3.

WITNESSES

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# UNITED STATES PATENT OFFICE.

JAMES G. CRAWFORD, OF BOSTON, MASSACHUSETTS.

## CENTRIFUGAL CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 273,262, dated March 6, 1883.

Application filed July 14, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES G. CRAWFORD, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful 5 Improvements in Centrifugal Clothes-Wringers, of which the following is a specification.

This is an improved self-balancing machine for wringing clothes, especially adapted to laundry and hotel use, constructed in the manner below described, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of a centrifugal clothes-wringer embodying my invention. Fig. 2 is a vertical section of the same. Fig. 8 is 15 a horizontal section on line  $xx$ , Fig. 1.

Similar letters of reference indicate like parts.

A represents a hollow base, extending upward from which are the posts B, supporting the stationary outer vessel or receptacle, C.

D is the inner vessel or receptacle, into which the clothes are placed. This has perforated sides, as usual, and is adapted to be rotated by being rigidly secured to the upright shaft E, to which is fixed the pulley E'. Power is applied to said pulley by means of an ordinary belt. This shaft E extends downward through the ball G, loosely placed in the box or bearing H, and has its bearing in the bearing disk or block I. The bearing disk or block I is secured by straps J, preferably of leather, to hooks K, passing from the inside, as shown in Fig. 3, through the sides of the hollow base A, and secured on the outside by means of nuts L in such a manner as to give suitable and equal tension to the straps J. Between the nuts L and the base A are placed rubber washers P. Fixed to the shaft E, near its lower end, and hence rotating with it, is the large balance-disk S.

The operation is as follows: The clothes having been thrown into the vessel D, often hastily and usually very unevenly, perhaps the bulk of them being on one side, power is applied to the pulley E'. The vessel D begins to rotate slowly at first, and is allowed to wabble or swing sidewise by the elasticity of the straps J and the rubber washers P and by the ball-bearing H G, provision being made for the play of the vessel D in the large opening C' in the outer vessel, C. As the speed of the rotation becomes greater the balance-disk S rights and steadies the shaft E and the vessel, and finally produces perfect rotation in each on its axis. As the machine is slowed the operation is reversed. The effect of a centrifugal wringer on the clothes contained therein is so well known as to require no explanation.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a centrifugal clothes-wringer, the combination, with the upright shaft E and vessel D, fixed thereto, the bearings of said shaft being somewhat elastic or yielding laterally, as shown, of the balance-disk S, fixed to said shaft below its bearings, substantially as and for the purpose set forth.

2. The herein-described centrifugal clothes-wringer, consisting essentially of the hollow base A, posts B, and stationary vessel C, the vessel D, shaft E, and bearings H G I, the straps and hooks J K, and the balance-disk S, constructed and arranged substantially as and for the purpose described.

JAMES G. CRAWFORD.

Witnesses:

HENRY W. WILLIAMS,  
JOSEPH ISHBAUGH.